DOCUMENT RESUME

ED 217 820 HE 015 257

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TITLE Evaluating the Effects of a Course Evaluation System Designed to Assist Students in Selecting Courses.
PUB DATE Mar 82
NOTE 33p.; Paper presented at the Annual Meeting of the American Educational Research Association (New York, NY, March 19-23, 1982).

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS *Academic Advising; College Faculty; College Students; *Course Descriptions; *Course Evaluation; Courses; Decision Making; Feedback; Higher Education; Information Dissemination; Information Needs; *Information Utilization; Institutional Research; Program Evaluation; *Student Evaluation of Teacher Performance; Student Reaction; Teacher Effectiveness; User Satisfaction (Information); Use Studies
IDENTIFIERS *Student Course Information Project; *University of Minnesota

ABSTRACT

The Student Course Information Project (SCIP) at the University of Minnesota, which provides information to help students in course selection and in planning programs of study, is described. SCIP began as a pilot project in the 1979 spring quarter, based on student opinions concerning course selection, statistics on incompletes and course withdrawals, and evaluations of graduates' opinions. The potential for using the course descriptions and evaluation of previous students is considered in relation to faculty participants in SCIP, carry over in course offerings from one year to the next, and variability in faculty members' course descriptions and students' evaluations of overall course quality. Usage of SCIP materials by students and their ratings of the usefulness of materials were assessed in 1979, 1980, and 1981. In preparation for each fall quarter registration, two informational reports are prepared for students' use: a newspaper tabloid containing limited information about each course included in the previous year's data collection; and an extensive SCIP course guide containing complete information about each course. Although SCIP is becoming more familiar to students, it is noted that usage of the SCIP materials is having relatively little impact on improving the quality of course selection and program planning decisions. If SCIP is having any effect, the impact should be observable through: annual surveys of students conducted during registration, registration statistics, and quasi-experimental studies. In addition to assisting students, the evaluation of instruction can provide information and motivation for faculty members to improve their instruction, along with data for making decisions regarding promotion, tenure, and salary. (SW)

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Evaluating the Effects of a Course Evaluation System Designed to Assist Students in Selecting Courses

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Presentation at the symposium "Using Course Evaluation Data in Selecting Courses: Yet Another Emergent and Controversial Use," held at the 1982 Annual Convention of the American Educational Research Association, held in New York City, March 19-23, 1982.

HE015257

Evaluating the Effects of a Course Evaluation System Designed to Assist Students in Selecting Courses

Abstract

Student evaluations of courses and instructors, in combination with instructors' descriptions of courses, comprise a project at a large midwestern university that was intended to assist students in selecting courses and in planning programs of study. After reviewing three primary purposes of student evaluation of instruction and the issues involved with each of these, the present paper describes the project of course information and evaluations, the course selection process, needs assessment data, potential usage, faculty participation, actual usage, and the impact of the project on improving course selection and program planning. Results from studies conducted during 1979, 1980, and 1981 about actual usage are described. The conclusions were that the information generated by the project has potential impact on course selection and program planning. Students currently enrolled in classes with low ratings were especially favorable toward having evaluative information available.

Evaluating the Effects of a Course Evaluation System
Designed to Assist Students in Selecting Courses

Although student evaluation of instruction began in the 1930's as a process to encourage instructor self-improvement, it emerged in the 1970's as one basis for making personnel decisions. A third purpose, to provide information to students for their use in program planning and course selection, has had renewed emphasis in institutions of higher education. Varying evaluative strategies are needed to address the differing purposes of student evaluation of instruction.

The primary evaluative question concerning the self-improvement purpose concerns the actual impact of evaluative data on a faculty member's teaching. According to McKeachie (1978) feedback from students is most likely to result in improvement if the ratings provide new information, the faculty member is motivated to improve, and the faculty member has resources available to improve his or her teaching. Although specific studies (e.g., Overall and Marsh, 1979) have found that feedback from students does relate to the improvement of instruction, improvement is more likely to occur if evaluative data are supplemented by consultation with the faculty member (Centra, 1979; Brock, 1981). Evaluation of the effects of evaluation of instruction on teaching performance is complex, but possibly the least complex of the three evaluative strategies.

Evaluation of instruction data are also used in making promotion, tenure, and salary decisions. Much of the research literature concerning the use of student evaluation of instruction for making personnel decisions has addressed psychometric and ethical issues, in contrast to the actual

effect of evaluation of instruction in improving the quality of personnel decision making. Recent findings from Cohen's (1981) meta-analysis of the validity of student ratings as a measure of teaching effectiveness suggest that ratings data can be a sound source of information. But according to Scriven (1981), there are numerous potential sources of error which could invalidate the use of student ratings for making specific personnel decisions. As institutions of higher education face shrinking financial resources, evaluation of instruction data are becoming increasingly important in administrative decision making.

We know the least about the use of evaluation of instruction data on students' course selection and program planning. An initial difficulty is the absence of systematic data concerning students' needs for information. Much of what is assumed by educators to guide students' selection of instructors has been derived from studies of qualities students believe as present in superior teachers (Feldman, 1976). A second difficulty is the lack of evaluation studies of the impact of evaluation of instruction systems in students' decision making. According to the findings of one earlier study (Leventhal, Abrami, Perry and Breen, 1975), the general reputation of a faculty member is a factor in students' decision making about particular courses.

A more recent study by Coleman and McKeachie (1971) used a quasi-experimental approach in their study of the frequency with which students selected differentially rated classes. Their study of course choices of 1150 students, some of whom were provided with results of a 13-item course ratings form for four different introductory political sciences courses, indicated that the course rated most highly was selected more frequently by those with access to ratings information. Their findings are suggestive

of the role of statistical information, summarizing previous students' ratings of instructional quality, in helping students select courses. Scriven (1981) suggests some interactions among purposes in that publishing student ratings to help students select courses may be a potential motivator to faculty to improve their teaching.

There is some evidence, then, to suggest that statistical information can influence course decisions. But there is no evidence that introducing course ratings data for hundreds and even thousands of courses, is an efficient and effective procedure that results in pedagogically sound decisions for students. My presentation addresses the evaluation of an institutional system designed to assist students in course selection and program planning.

Of the three purposes noted above, the challenges to an evaluator are greatest in assessing the impact on students' program planning and course selection. My presentation includes a discussion of each of the following: (a) the Student Course Information Project (SCIP); (b) the course selection process at a major institution; (c) needs assessment data concerning problems encountered in course selection and advising; (d) the potential for use of the SCIP materials at a large institution; (e) faculty participation in SCIP and students' usage of SCIP materials; and (f) the impact of SCIP on improving the course selection and program planning process.

Description of the Student Course Information Project

The Student Course Information Project (SCIP) began as a pilot project Spring quarter, 1979, as a joint endeavor of student government and the Offices of the Vice Presidents for Academic Affairs and Student Affairs. Faculty who volunteer in SCIP are asked to: (a) complete a form (the Course Information Profile) describing how they teach a particular course; and (b) administer an

evaluation form (the Course Opinion Profile) to students at the end of the quarter. Results of those two forms serve as the basis for information prepared for students' use in program planning and course selection.

On an annual basis in time for Fall quarter registration which begins in August, two informational reports are prepared for students' use: (a) a newspaper tabloid containing limited information about each course included in the previous year's data collection; and (b) an extensive SCIP COURSEGUIDE containing complete information about each course. For the most recent year, 80,000 tabloids and 350 SCIP COURSEGUIDE bluebooks were distributed. In a subsequent section of my presentation, I will summarize what we know about students' and advisers' use of the two reports.

Course Selection at a Major Institution

Evaluating a system for using course evaluation data for course selection purposes must begin with an understanding of how course selection and registration occurs at a particular institution. Problems I encountered in setting up a comprehensive evaluation plan presented even greater problems in trying to implement SCIP at the University of Minnesota. Before I summarize some relevant data, I would like to list some of the problems we encountered.

Several problems have surfaced during the three years in which SCIP has operated. Among the more significant of the problems are the following: (a) varying course selection guidelines and registration timetables and procedures among the 20 colleges on the Twin Cities Campus of the University of Minnesota; (b) implicit guidelines for advisers in some colleges against assigning students to instructors based on the instructor's reputation as a teacher; (c) highly structured curricula in some departments/colleges so that

students have virtually no freedom in course selection and limited freedom in instructor selection; (d) course registration limits, closed classes, and rotating alphabetical priorities in registration dates; (e) no designation of instructors for particular sections/courses in some departments (e.g., mathematics) until the day before each quarter begins; (f) the absence of an easy, efficient and economical system to distribute materials to students, 85% of whom do not live on or close to campus; and (g) the impending change in registration dates, beginning Spring quarter 1982 as a result of implementation of computerized registration, and including Spring quarter program planning and preliminary course selection for the entire subsequent academic year.

Needs Assessment Data: The Nature of the Problem

Tracing the history of discussion concerning the need for SCIP involves both political concerns as well as evaluative data. SCIP was not the first system of its kind at the University of Minnesota. Several years ago, a student operated system "Salvage", produced narrative descriptions of instructors and, more recently, the "Student Survival Kit" summarized evaluations of instructors based on questionnaire responses of graduates from the faculty members' department. A third system, "Prospectus", had been in operation for several years in the College of Liberal Arts, but was limited to course descriptions and did not include students' evaluations. The point I wish to make is that the perceived need for course selection information has had a long history at the University of Minnesota, although neither of the systems containing course evaluation data has been particularly well received by faculty.

Putting history of other projects aside for a moment, I would like to

present a few data elements which suggest the need for a SCIP-like system. In addition to supporting the need for SCIP, the following data elements will be used in the future to assess the impact of SCIP on improving the quality of course selection and program planning. The three types of data are: (a) opinions of current students; (b) course registration statistics; and (c) evaluations of University graduates.

Current students. As part of the annual survey of students conducted during Spring quarter registration, we included two questions concerning course selection. Those findings, reported in Table 1, suggest that we could be doing a better job in helping students select

Insert Table 1 about here

courses. Slightly more than one-fifth of the students indicated that they had dropped at least one course during the past year because of poor prior information about the course. Of the students surveyed, 26.8% were satisfied and 2.5% were very satisfied with the information received from the University to help them select courses.

Course registration statistics. Actual course registration statistics, especially frequencies and percentages of grades of Incomplete and Withdrawal, provide yet another index of the need for better course selection procedures. As the data in Table 2 and 3 suggest, withdrawals of around 5% of the total

Insert Table 2 about here

Insert Table 3 about here

Table 1

Current students' (N=3,437) descriptions of course cancellations due to poor prior information about courses and satisfaction with information received[a]

Question Response	N	%
Have you cancelled a course during last year because of poor prior information?	3243	
Yes	694	21.4
No	2549	78.6
How satisfied are you with information received from the University to help you select courses?	3157	
Very dissatisfied	153	4.9
Dissatisfied	541	17.1
Neutral	1539	48.8
Satisfied	845	26.8
Very satisfied	79	2.5

[a]Responses obtained from 3,537 students (35.0% of 10,072 students who received Student Services Card as part of Spring quarter 1981 registration materials.)

Table 2

Distribution of Students Receiving Grade of "Withdrawal" at University of Minnesota, Twin Cities Campus

College[a]	1978-79						1979-80						1980-81						1981-82					
	Fall		Winter		Spring		Fall		Winter		Spring		Fall		Winter		Spring		Fall		Winter		Spring	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Agriculture	344	3.4	268	2.9	193	2.9	193	3.3	160	2.7	196	3.3	191	3.3	178	3.1	156	2.9						
Education	399	3.2	437	3.9	377	3.4	363	3.5	465	4.2	385	3.6	298	3.0	397	3.6	394	3.7						
General College	459	5.8	496	7.2	443	7.7	544	6.2	604	7.8	502	7.6	441	4.7	548	6.3	526	7.1						
Home Economics	--		--		81	3.0	77	2.9	82	3.4	73	2.8	65	2.7	89	4.0	74	3.1						
Liberal Arts	2963	6.1	2741	6.2	2075	5.0	2969	6.0	2808	6.0	2201	5.1	2896	5.7	2679	5.6	2239	5.2						
Technology	2532	9.3	1945	7.2	1621	6.8	2596	8.5	2379	8.0	1719	6.9	2829	8.7	2581	8.2	1891	7.0						
Total Twin Cities	7882	5.7	6825	5.2	5801	4.6	8082	5.7	7732	5.5	5997	4.8	7891	5.5	7633	5.5	6340	5.1						

[a] Specific colleges listed are those in which a substantial number of faculty participated in SCIP.

Table 3

Distribution of Students Receiving Grade of "Incomplete" at University of Minnesota, Twin Cities Campuses

College[a]	1978-79						1979-80						1980-81						1981-82					
	Fall		Winter		Spring		Fall		Winter		Spring		Fall		Winter		Spring		Fall		Winter		Spring	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Agriculture	639	6.3	707	7.6	456	6.8	390	6.6	404	6.8	450	7.5	337	5.8	365	6.3	348	6.4						
Education	936	8.9	1141	10.2	1069	9.6	968	9.3	919	8.3	1041	9.8	1038	10.4	958	8.7	875	8.2						
General College	606	7.7	623	9.0	471	8.2	699	8.0	591	7.6	576	8.7	725	7.7	827	9.5	588	8.0						
Home Economics	--		--		248	9.0	217	8.2	189	7.8	214	8.2	186	7.7	226	10.1	219	9.3						
Liberal Arts	3726	7.7	4128	9.3	3508	8.4	3397	6.9	3375	7.2	3526	8.1	3158	6.2	3265	6.9	3214	7.4						
Technology	981	3.6	1194	4.4	912	3.8	904	3.0	884	3.0	865	3.5	892	2.8	1163	3.7	988	3.7						
Total Twin Cities	8584	6.3	9551	7.2	8423	6.7	8234	5.8	7753	5.5	8207	6.6	8234	5.8	8351	6.1	7738	6.2						

[a] Specific colleges listed are those in which a substantial number of faculty participated in SCIP.

registrations and slightly higher percentages of incompletes pose serious problems at a large institution. Not only is it wasteful in terms of instructional resources and students' time, it is a potential factor in students' decisions to withdraw from the institution or to drop out of higher education. Another issue is the feeling among academic advisers that students intentionally register for more courses than they intend to complete, and then they cancel, withdraw or receive incompletes in the courses viewed as less valuable to them.

Evaluations by graduates. Yet another source of needs assessment data comes from our systematic evaluations of opinions of graduates. The item most pertinent to SCIP concerns graduates' responses to the question "How would you rate the performance of your major advisor?" Consistent with earlier findings in several unrelated studies at the University of Minnesota, students give consistently low ratings to their

Insert Table 4 about here

major advisors, ratings which are considerably lower than students' ratings of the overall quality of instruction at the University.

One important role for advisors is to help students plan their academic programs, select particular courses, and choose a major in preparation for a career after graduation. SCIP materials are intended to be used by students and their advisors. If the materials are used and do have an impact on course selection, graduates' evaluations of advisors should improve as SCIP becomes an integral part of the advising process.

Potential for Use of SCIP Materials

Some of the points I mentioned earlier in my discussion of course selection at a major institution provide the context in which I will discuss

Table 4

Responses of 1977-78 University of Minnesota graduates to specific items on the Former Student Survey Project [a]

	Advisor (6,422)[a]		Instruction (N=6703[b])	
Response	N	%	N	%
Very poor	686	11	48	1
Poor	745	12	179	3
Fair	1326	21	1051	16
Good	1323	21	2680	40
Very good	1220	19	2309	34
Excellent	1122	17	436	7

[a] The specific question was "How would you rate the performance of your major advisor?"

[b] The specific question was "How would you rate the overall quality of instruction at the University?"

data pertaining to the potential for use of SCIP materials. I will present three types of data: (a) faculty participation in SCIP; (b) carry over in course offerings from one year to the next, and (c) variability in faculty members' course descriptions and students' evaluations of overall course quality. Then I will summarize extant data describing students' use of SCIP materials.

Faculty participation in SCIP. With the exception of the Spring quarter 1979 pilot in which department heads in selected departments strongly encouraged faculty participation in SCIP, participation in SCIP is voluntary. Periodic invitations to participate are sent to faculty and each department has a SCIP coordinator who serves as a liaison between SCIP and departmental faculty. Faculty participants in SCIP receive a summary of the COP results a few weeks after the end of the quarter in which they participate.

As the results in Table 5 indicate, absolute numbers of faculty participants in SCIP have remained fairly consistent for the years 1979-80 and 1980-81. Participation rates for Fall quarter 1981, the first part of the 1981-82 cycle, are slightly higher than those for the previous Fall quarter. Overall participation frequencies do not tell the whole story.

Insert Table 5 about here

Carry-over in course offerings. The SCIP system features data collection for Fall, Winter and Spring quarters, with distribution of materials beginning in August in time to be used for Fall quarter registration. The data I am about to present address the question

Table 5

Faculty participation in SCIP:

Spring quarter 1979 pilot project through Fall quarter 1981

Year	Number Courses	Number Departments
Pilot: Spring 1979	306	12
1979-80	750	69
1980-81	789	85
Fall Quarter 1981	318	62

"Of the faculty/courses that participate in SCIP during a given year, how many of those faculty teach the same course the following year?" A system in which course teaching responsibilities change substantially from year to year is unlikely to benefit from a SCIP-like system.

We began by determining the number of 1, 3, and 5-level courses for each college for the 1980-81 registration bulletins (Fall, Winter, and Spring) for those departments which had participated in SCIP during the previous year 1979-80. The next step was to determine which of those courses had been evaluated by SCIP the previous year, and to calculate carry-over percentages for each of the colleges.

I would like to present illustrative data for the four largest colleges: Education, General College, Liberal Arts, and the Institute of Technology. Results in Table 6 indicate some carry-over in utilization

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Insert Table 6 about here

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possibilities. Utilization possibilities were greatest for the General College, the unit which has the largest number of standard course offerings routinely taught by the same faculty members. In the largest and most diverse college, Liberal Arts, 18.4%, 16.3%, and 13.5% of each quarter's course offerings in specified departments were included in SCIP materials available to students. These data, combined with previously presented data concerning faculty participation, suggest limited potential for using SCIP in course selection.

Distribution of material to students. As happens in most institutions, students are deluged with numerous materials at orientation sessions and,

Table 6

Description of the extent of coverage of SCIP course evaluations for courses offered during 1981 for departments which participated in SCIP during 1979-80

College	Fall Quarter							Winter Quarter							Spring Quarter						
	Total Offerings	SCIP		Same Course and Instructor		Same Course Different Instructor		Total Offerings	SCIP		Same Course and Instructor		Same Course Different Instructor		Total Offerings	SCIP		Same Course and Instructor		Same Course Different Instructor	
		N	%	N	%	N	%		N	%	N	%	N	%		N	%	N	%	N	%
Education	219	30	13.7	11	5.0	19	8.7	274	24	8.8	8	2.9	16	5.8	341	31	9.1	17	5.0	14	4.1
General College	126	81	64.3	45	35.7	36	28.6	126	73	57.9	37	29.4	36	28.6	122	73	59.8	30	24.6	43	35.3
Liberal Arts	719	132	18.4	69	9.6	63	8.8	790	129	16.3	65	8.2	64	8.1	830	112	13.5	47	5.7	65	7.8
Institute of Technology	225	143	63.6	20	8.9	123	54.7	368	126	34.2	12	3.3	114	31.0	407	122	30.0	15	3.7	107	26.3

subsequently, in the registration process. Introducing yet another set of materials, extensive course descriptions and evaluations by previous groups of students, increases the likelihood of information overload. The consequence may be that students quickly focus on the immediate task at hand: getting registered for the specific courses they need for their program and arranging a weekly schedule that is compatible with having a part-time job. A more desirable system would be to distribute materials to students far in advance of the actual registration process, so that they and their advisors can use the information, free from the immediate need to register.

Content of SCIP materials. Yet another issue concerning the potential for usage of SCIP materials is the variation in instructors' descriptions of course content (the Course Information Profile) and in students' evaluations of the courses (the Course Opinion Profile). Presumably, the greater the variation the greater the potential for using SCIP materials in course selection and program planning.

Quantifying variation in CIP results is difficult, given the particular format of the questionnaire. In some situations (e.g., in which several instructors taught sections of an introductory course, especially in the Institute of Technology), the SCIP coordinator prepared one CIP and duplicated it for participating faculty. For other areas, variation was evident in instructors' descriptions of how they taught a particular course. The following example illustrates some of this diversity in CIP's completed by faculty:

Course Ast 1-011 Descriptive Astronomy

Instructor A	Instructor B
PURPOSE OF COURSE: A survey of general astronomy. Includes basic physical principles, the sun and solar systems, stars, the Galaxy, galaxies, cosmology and the universe. Intended primarily for non-science majors.	PURPOSE OF COURSE: To provide a survey of basic physical science for non-science majors
INTENDED STUDENT AUDIENCE: (Rank in priority order, 1=first priority)	INTENDED STUDENT AUDIENCE: (Rank in priority order, 1=first priority)
3 Dept. majors/pre-majors/minors	___ Dept. majors/pre-majors/minors
2 Majors in related fields	___ Majors in related fields
1 Other students, for general education	1 Other students, for general educ.
___ Other:_____	___ Other:_____
COURSE EMPHASIS-Percent on each	COURSE EMPHASIS-Percent on each
60 % Basic knowledge and principles	100 % Basic knowledge and principles
10 % Application of knowledge/ principles	___% Application of knowledge/ principles
30 % Analysis, synthesis, evaluation	___% Analysis, synthesis, evaluation
___% Skill, manipulation, practice	___% Skill, manipulation, practice
___% Attitudes, values, self-awareness	___% Attitudes, values, self-awareness
___% Other:_____	___% Other: _____
REQUIRED READING:	REQUIRED READING:
500 Pages-Textbooks	500 Pages-Textbooks
___ Pages-Library Materials (books, articles)	300 Pages-Library Materials (books, articles)
REQUIRED PAPERS AND REPORTS (number of each)	REQUIRED PAPERS AND REPORTS (number of each)
___ Major research reports/term papers	___ Major research reports/term papers
___ Brief written reports or papers	3 Brief written reports or papers
___ Oral reports	___ Oral reports
___ Problem-solving assignments	___ Problem-solving assignments
___ Special projects (e.g., field work)	2 Special projects (e.g., field work)
___ Computer assignments	___ Computer assignments
NUMBER OF EXAMS	NUMBER OF EXAMS
1 Final Exam	1 Final Exam
2 Mid-quarter exam(s)	1 Mid-quarter exam(s)
___ Quizzes	___ Quizzes

Similarly, we looked at the variation in mean student ratings from COP's collected from faculty (N=1349) participating in SCIP from Fall quarter 1979 through Spring quarter 1981. The data I wish to present now indicate moderate variability in mean ratings for faculty participating in SCIP.

Although we use six student ratings items, I will focus on question 4 "All things considered, how would you rate this course?" in my discussion of the following tables. In the first analysis, contained in Table 7 we examined means for all courses (1-xxx, 3-xxx, and 5-xxx level) in all colleges. Of the 1345 courses, 16.6% had means of 3.0 or lower, 62.9% had

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Insert Table 7 about here

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means between 3.0 and 4.0, and 20.5 had means of 4.0 or greater. When we composed a more homogeneous subset of courses, only 1-xxx level courses in Liberal Arts, we found 10.3% with means of 3.0 or less, 29.6% with means greater than 4.0.

Insert Table 8 about here

Usage of SCIP Materials

Now I would like to turn to evaluative data concerning students' use of SCIP materials. During the three-year history of the project, several studies of usage have been conducted. I will summarize usage data from each of several studies.

Usage of pilot project results. The 1979 pilot project compiled information for 306 course sections taught by faculty from the 12 departments in the pilot project. (The courses enrolled about 10,500 students).

Table 7
Summary of mean ratings from courses (N=1349)
in Student Course Information Project (SCIP)
from Fall Quarter 1979 through Spring Quarter 1981: Across
all 1-xxx, 3-xxx, and 5-xxx level courses in all colleges

	SCIP Evaluation Item											
	Q1		Q2		Q3		Q4		Q5		Q6	
Mean Rating	N	%	N	%	N	%	N	%	N	%	N	%
	1345[a]		1345[a]		1345[a]		1345[a]		1349[a]		1349[a]	
1.5	-	-	-	-	-	-	-	-	-	-	1	.1
1.6	-	-	-	-	-	-	-	-	-	-	-	-
1.7	-	-	2	.1	1	.1	-	-	-	-	-	-
1.8	-	-	2	.1	4	.3	-	-	-	-	-	-
1.9	6	.4	4	.3	4	.3	1	.1	-	-	-	-
2.0	4	.3	11	.8	1	.1	1	.1	1	.1	-	-
2.1	6	.4	6	.4	4	.3	3	.2	1	.1	3	.2
2.2	8	.6	8	.6	9	.7	1	.1	4	.3	5	.4
2.3	13	1.0	11	.8	8	.6	10	.7	4	.3	2	.1
2.4	9	.7	12	.9	11	.8	7	.5	6	.4	13	1.0
2.5	21	1.6	20	1.5	14	1.0	9	.7	18	1.3	26	1.9
2.6	18	1.3	14	1.0	7	.5	18	1.3	16	1.2	35	2.6
2.7	17	1.3	24	1.8	23	1.7	19	1.4	17	1.3	43	3.2
2.8	25	1.9	25	1.9	20	1.5	38	2.8	32	2.4	73	5.4
2.9	31	2.3	34	2.5	28	2.1	52	3.9	47	3.5	94	7.0
3.0	53	3.9	32	2.4	39	2.9	65	4.8	70	5.2	132	9.8
3.1	62	4.6	51	3.8	43	3.2	58	4.3	88	6.5	143	10.6
3.2	52	3.9	48	3.6	42	3.1	97	7.2	115	8.5	136	10.1
3.3	56	4.2	60	4.5	47	3.5	95	7.0	113	8.4	137	10.2
3.4	71	5.3	71	5.3	66	4.9	95	7.0	119	8.8	111	8.2
3.5	87	6.5	79	5.9	70	5.2	108	8.0	134	9.9	104	7.7
3.6	89	6.6	87	6.5	89	6.6	93	6.9	132	9.8	77	5.7
3.7	104	7.7	100	7.4	105	7.8	119	8.8	118	8.7	73	5.4
3.8	80	5.9	77	5.7	90	6.7	92	6.8	87	6.4	34	2.5
3.9	90	6.7	79	5.9	88	6.5	90	6.7	68	5.0	40	3.0
4.0	87	6.5	102	7.6	106	7.9	62	4.6	55	4.1	28	2.1
4.1	58	4.3	80	5.9	77	5.7	69	5.1	48	3.6	13	1.0
4.2	81	6.0	98	7.3	96	7.1	48	3.6	31	2.3	10	.7
4.3	54	4.0	73	5.4	69	5.1	38	2.8	11	.8	10	.7
4.4	52	3.9	50	3.7	68	5.1	22	1.6	5	.4	-	-
4.5	41	3.0	40	3.0	40	3.0	27	2.0	7	.5	3	.2
4.6	36	2.7	19	1.4	33	2.5	8	.6	2	.1	-	-
4.7	23	1.7	16	1.2	27	2.0	2	.1	-	-	2	.1
4.8	6	.4	6	.4	9	.7	-	-	-	-	1	.1
4.9	-	-	-	-	3	.2	2	.1	-	-	-	-
5.0	5	.4	4	.3	4	.3	-	-	-	-	-	-
Overall												
	$\bar{x}$ = 3.65		$\bar{x}$ = 3.66		$\bar{x}$ = 3.73		$\bar{x}$ = 3.54		$\bar{x}$ = 3.45		$\bar{x}$ = 3.25	
	SD = .59		SD = .59		SD = .58		SD = .49		SD = .42		SD = .41	

[a]Where totals do not sum to 1,349 the remainder represent courses for which course means could not be calculated due to missing data.

Table 8

Summary of mean ratings from courses (N=1349)
in Student Course Information Project (SCIP)
from Fall Quarter 1979 through Spring Quarter 1981:
1-xxx level CLA courses only

	SCIP Evaluation Item											
	Q1		Q2		Q3		Q4		Q5		Q6	
Mean Rating	N	%	N	%	N	%	N	%	N	%	N	%
	108[a]		108[a]		108[a]		108[a]		108[a]		108[a]	
2.4	1	.9	-	-	-	-	-	-	-	-	1	.9
2.5	2	1.9	1	.9	-	-	-	-	1	.9	1	.9
2.6	1	.9	-	-	-	-	2	1.9	2	1.9	4	3.7
2.7	5	4.6	3	2.8	3	2.8	2	1.9	-	-	7	6.5
2.8	1	.9	2	1.9	1	.9	2	1.9	2	1.9	13	12.0
2.9	3	2.8	1	.9	2	1.9	1	.9	7	6.5	10	9.3
3.0	2	1.9	3	2.8	6	5.6	4	3.7	6	5.6	20	18.5
3.1	3	2.8	6	5.6	4	3.7	7	6.5	9	8.3	7	6.5
3.2	9	8.3	7	6.5	7	6.5	17	15.7	8	7.4	12	11.1
3.3	6	5.6	2	1.9	2	1.9	8	7.4	8	7.4	5	4.6
3.4	4	3.7	7	6.5	5	4.6	3	2.8	7	6.5	9	8.3
3.5	3	2.8	6	5.6	7	6.5	8	7.4	14	13.0	4	3.7
3.6	8	7.4	11	10.2	5	4.6	7	6.5	13	12.0	3	2.8
3.7	11	10.2	8	7.4	9	8.3	10	9.3	9	8.3	5	4.6
3.8	4	3.7	2	1.9	6	5.6	2	1.9	11	10.2	2	1.9
3.9	5	4.6	1	.9	3	2.8	3	2.8	2	1.9	-	—
4.0	3	2.8	14	13.0	6	5.6	8	7.4	4	3.7	3	2.8
4.1	8	7.4	3	2.8	5	4.6	7	6.5	3	2.8	-	—
4.2	5	4.6	4	3.7	6	5.6	5	4.6	1	.9	1	—
4.3	6	5.6	6	5.6	9	8.3	5	4.6	-	-	1	—
4.4	5	4.6	11	10.2	5	4.6	3	2.8	-	-	-	—
4.5	2	1.9	5	4.6	6	5.6	2	1.9	1	.9	-	—
4.6	5	4.6	1	.9	5	4.6	1	.9	-	-	-	—
4.7	1	.9	3	2.8	5	4.6	-	-	-	-	-	—
4.8	4	3.7	1	.9	-	—	-	-	-	-	-	—
4.9	-	-	-	-	-	—	1	.9	-	-	-	—
5.0	1	.9	-	-	-	—	-	-	-	-	-	—
Overall												
	$\bar{x}$ = 3.72		$\bar{x}$ = 3.76		$\bar{x}$ = 3.82		$\bar{x}$ = 3.59		$\bar{x}$ = 3.44		$\bar{x}$ = 3.13	
	SD = .61		SD = .54		SD = .56		SD = .49		SD = .38		SD = .37	

[a]Where totals do not sum to 108 the remainder represent courses for which course means could not be calculated due to missing data.

The following Fall quarter 1979, we surveyed 417 students enrolled in four courses (Family Social Science 1401 (N=53), Child Psychology 3/503 (N=35), General College 1815 (N=22), and Theatre 1101 (N=307))concerning their awareness of SCIP and their use of SCIP materials in registering for the particular course. Only 12.4% (N=51) of the students were aware of SCIP, and of those 51 students only three had used the SCIP materials to register for Fall quarter courses.

Since the purpose of the pilot project was to test the system and, only secondarily, to encourage the use of SCIP materials, the low usage percentages were not alarming. But even those initial findings are consistent with later findings concerning low usage.

Fall quarter 1980 usage study. We surveyed students enrolled in ten Fall quarter courses that had been evaluated by SCIP the previous year. Usage estimates from this study may overestimate general usage because of our selection of courses. But we were then interested in estimating some best usage rates. Of the 782 students surveyed, 37.5% indicated that they had heard of SCIP, 13.7% had used the SCIP tabloid, and 9.9% had used the more extensive SCIP COURSEGUIDE.

Ratings of usefulness were not particularly high for those students (N=137) who had used SCIP materials. Evaluations of usefulness of the tabloid were as follows: "Not useful (N=34, 34.8%), "slightly useful" (N=35, 26.3%), "useful" (N=47, 34.3%), "very useful" (N=16, 11.7%), and "extremely useful" (N=4, 2.9%).

Spring quarter 1981 registration study. Yet another study focused on comprehension evaluations from students who used SCIP materials in the registration process. We sent a letter to each of 204 freshmen enrolled in the College of Liberal Arts Winter quarter 1981. We sent a letter to each student in which we asked him or her to use the enclosed SCIP tabloid when they

registered for Spring quarter 1981. Students (N=72) completed a three-page evaluation questionnaire concerning their awareness of and use of SCIP materials.

We asked students to rate the usefulness of the SCIP materials and then to comment about its usefulness. Average ratings on a five-point scale was between "slightly useful" and "useful". Specific percentages were as follows: "not useful" (15.7%), "slightly useful" (27.1%), "useful" (35.7%), "very useful" (20.0%), and "extremely useful" (1.4%). Responses to the open-ended portion of the question suggest that the incompleteness of the course listings was a major reason for the low usefulness ratings. The remainder of the questionnaire concerned the content and format of the SCIP tabloid. Virtually no students commented negatively about the statistical nature of the course evaluation summaries.

Student services registration survey. As part of the Spring quarter 1981 registration process, the Student Services Card (SSC) contained six SCIP-related questions. Of the 10,072 survey cards distributed to a random sample of about one fourth of all currently registered students, 3,537 (35.0%) were returned and served as the basis for the analysis provided by the Office of Admissions and Records. The respondents were 15.5% freshmen, 20.2% sophomores, 21.6% juniors, 20.9% seniors, and 21.6% graduate students or adult specials.

About half (47.3%) of those surveyed had heard of SCIP, a substantially higher percentage than those reported earlier in my presentation. But relatively low percentages had used SCIP materials: 11.2% had used the tabloid Fall quarter 1980, 12.1% for Winter quarter 1981, and 11.3% for Spring quarter 1981. Percentages for the more extensive SCIP COURSEGUIDE were 6.7%, 7.2%, and 6.3% for each of the three quarters.

Findings from this study yield one of the more reliable indications of SCIP usage. The same procedure is underway again for Spring quarter 1982 and will provide us with comparative information across the three years of SCIP's experimental period. And, more importantly, questions about students' awareness of SCIP will help us evaluate the effect of this past year's emphasis on better publication of SCIP's existence.

Questionnaire in SCIP tabloid. The last page of the 1981-82 SCIP tabloid contained several questions about SCIP. Of the approximately 41,000 tabloids distributed for Fall quarter 1981, questionnaires were returned by 18 students. I did not expect thousands of responses, but was a bit surprised by this dismal a response. Results are consistent with other findings: relatively low usefulness ratings, primarily because of the lack of coverage. Specific ratings were "not useful" (44.4%), "slightly useful" (22.2%) and "useful" (27.7%); none rated the booklet as "very useful" or "extremely useful." Of the 18 students, 38.8% had used the more extensive SCIP COURSEGUIDE Bluebook.

Fees committee study. The most recent index of usage came from a study done by Student Life Studies and Planning at the request of the University's Student Service Fee Committee. The survey results are based on telephone interviews, conducted between November 20-30, 1981, with 417 currently enrolled students.

Of the 417 students, 64.3% (N=265) had looked at or seen the SCIP COURSEGUIDE tabloid which was handed out with Fall quarter and Winter quarter registration materials. Of the 268 who had seen it, 20.5% had used it to help choose Fall quarter classes and 21.0% for the upcoming Winter quarter. (These usage rates represent 13.2% and 13.4%, respectively, of the total of 417 surveyed.) About one-fifth (21.3%) had looked at or seen the more

extensive SCIP COURSEGUIDE Bluebook which was available in advising offices and campus libraries. (Usage rates for the Bluebook were 4.6% and 3.4% for Fall and Winter quarters, respectively.)

Impact on Improving Course Selection and Program Planning Decisions

Previously presented data are suggestive of some of the dilemmas presented in trying to assess impact. We have much data to suggest that SCIP is becoming more familiar to students. But we also know that usage of SCIP is having relatively little impact on improving the quality of course selection and program planning decisions. If SCIP is having any effect, the impact should show up in a number of places.

Annual surveys of students conducted during registration: Previously presented results (Table 1) indicated a moderate amount of student dissatisfaction with information available to them to assist in course selection. If SCIP is, indeed, having an effect, dissatisfaction should decrease. Students complete Spring quarter registration this week, and within a few weeks we will have comparative data to use in assessing SCIP's impact. (A confounding factor is that this Spring registration is the first time students registered with a new computerized registration system.)

Registration statistics. Registration statistics change for a variety of reasons so, taken alone, they cannot be the sole criterion for determining SCIP's impact. Course registration statistics presented previously (Tables 2 and 3) will serve as the "baseline" in which we track frequencies of Incompletes and Withdrawals during the coming years. We will use decreases in frequencies in those registrations, especially in colleges which have a high participation rate in SCIP, as an indication that SCIP is having an impact.

Quasi-experimental studies. Studies similar to the one conducted by Coleman and McKeachie (1981) will be used to examine the impact of SCIP

materials on course selection. Designing a controlled experiment in a complex registration system has been a difficult task, but may become easier with the advent of the computerized registration system. Achieving even moderate control over the experimental variable (SCIP information versus "regular" information) poses the greatest challenge.

Our one attempt at such a study was to survey students enrolled in SCIP-evaluated courses, and to compare responses of students in courses with high rating with students in courses with low ratings.

Results contained in Table 9 describe differences between three courses with high overall course ratings ($\bar{x} \geq 2.32$) and three courses with low course ratings ($\bar{x} \leq 2.12$). The largest and most interesting difference was for the

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Insert Table 9 about here

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reason "The reputation of the instructor teaching the course." The finding is suggestive of the potential impact which SCIP materials have in guiding students' selection of courses. A second interesting finding was that students in courses with low overall course ratings were more in favor of the evaluation component of SCIP than students in courses with high ratings.

Table 9

Comparisons between courses with low and high SCIP evaluations: Reasons for enrolling in the course, satisfactions with available course registration information, and opinions about providing course descriptions and previous students' evaluations[a]

Item	SCIP Evaluation Level[b] High N	$\bar{x}$	SD	Low N	$\bar{x}$	SD	t-value
a. My expectations about how much work I would probably have to put into the course	240	2.53	.91	239	2.44	.99	.99
b. My expectations about how the course would be taught	240	2.87	1.01	239	2.86	1.04	.09
c. My expectations about the grading and testing procedures used in the course	240	2.74	1.01	239	2.59	1.05	1.62
d. The suggestions of my adviser	237	1.93	1.10	232	1.94	1.20	-.11
e. The reputation of the instructor teaching the course	240	2.31	1.30	237	1.96	1.18	3.09***
f. Other students I knew planned to register for the course	240	1.40	.86	238	1.32	.77	.97
g. The content of the course	239	3.58	.99	238	3.66	1.05	-.88
h. The fact that the course satisfied a distribution requirement	240	3.38	1.39	239	3.06	1.45	2.41*
Satisfaction with information available	236	3.20	1.01	236	3.31	.96	-1.21
Opinion about providing course descriptions	237	4.43	.64	234	4.44	.67	-.16
Opinion about providing students' evaluations	235	3.82	.86	234	4.05	.89	-2.85**

[a]The overall course opinion item reported in the 1979-80 SCIP report was used in selecting low versus high course evaluations

[b]Low versus high SCIP evaluations were defined as follows: Low equals mean overall rating of 2.12 or lower and high equals mean overall rating of 2.32 or higher. The actual means for the three low courses were 2.12, 1.91 and 2.07; means for the high courses were 2.32, 2.94 and 2.68.

*$p \leq .05$
**$p \leq .01$
***$p \leq .001$

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